

Classification

AWS A5.4

E308L-16

Characteristics and typical fields of application

Avesta 308L-16 Cryo is a Cr-Ni electrode with carefully control ferrite content suit for cryogenic and low temperature application down to -196°C with lateral expansion $> 0,38$ mm. It is used for all position welding of 1.4301/ASTM 304 type stainless steels. corrosion resistance: very good under fairly severe conditions, e.g. in oxidation acids and cold or dilute reducing acids.

Base Materials

ASTM 304, 304L; BS304S31, 304S11, 304S61; SS2333, 2352

Typical analysis of all weld metal (Wt.-%)

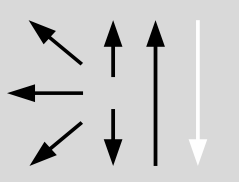
C	Si	Mn	Cr	Ni	Mo	Cu	N
0,02	0,5	1,20	19,5	10,4	0,05	0,03	0,05

 Ferrite Number \approx 3-5 FN WRC 92

Mechanical properties of the weld metal

Heat Treatment	Yield strength R_e N/mm ²	Tensile strength R_m N/mm ²	Elongation ($L_0=4d_0$)	Impact work ISO-V K_V (J)	Lateral Expansion
	MPa	MPa	%	-196°C	-196°C
As Welded	430 (\geq 320)	560 (\geq 520)	45 (\geq 30)	35 (\geq 32)	$>0,38$ mm

Operating Data

	Polarity DC (+)	Interpass temperature : 150°C Heat Input: Max. 2.0 KJ/mm Re-drying for 3 h at $250 - 280^{\circ}\text{C}$
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Approval

ABS

Size, Packing and Recommended welding parameters

Size (mm)	Kg / Pack	Kg / Box	Amperage (A)
2.50 x 350	5,00	15,00	50-80
3.25 x 350	5,00	15,00	80-120
4.00 x 350	5,00	15,00	100-160